

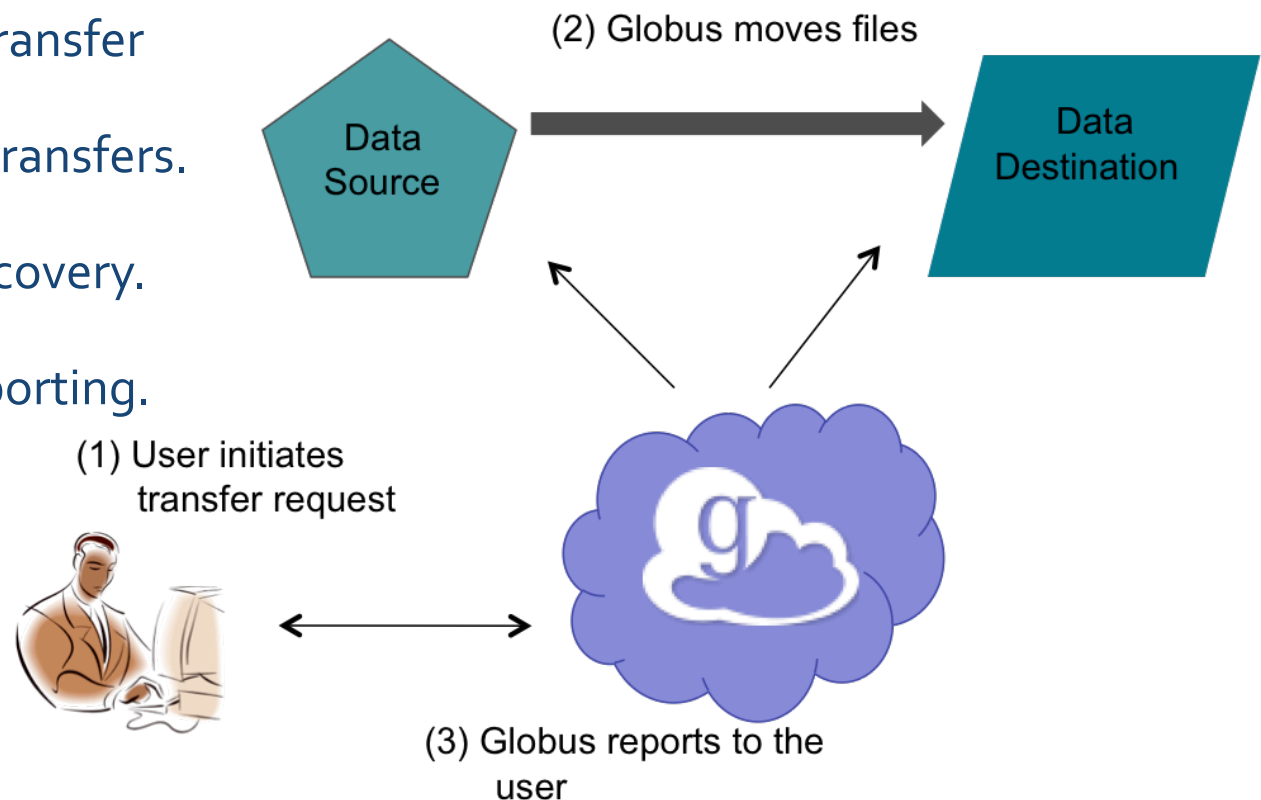
Globus (Transfers and Sharing)



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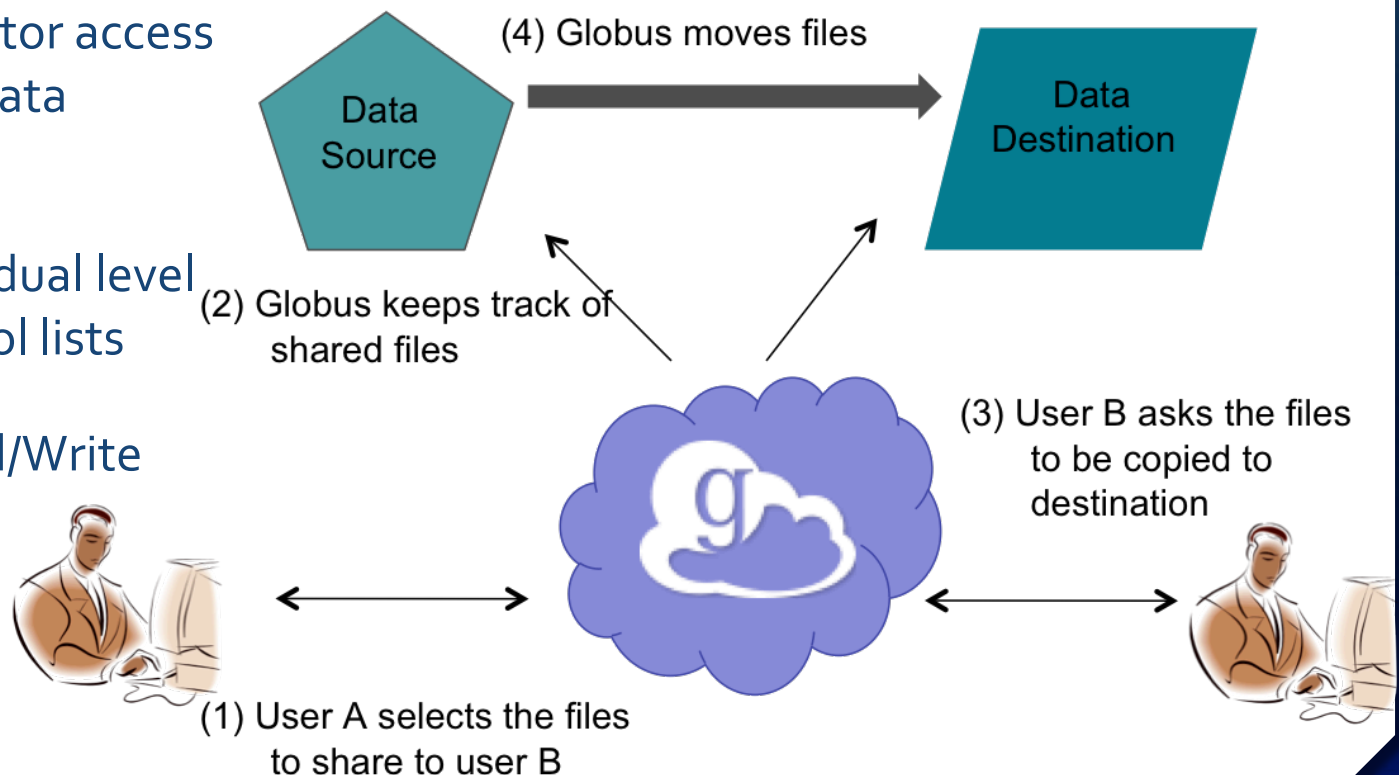
Globus – Managed Transfer service

- Fast, Reliable file transfer
- “Fire-and-forget” transfers.
- Automatic fault recovery.
- Detailed status reporting.



Globus – Sharing service

- Sharing data off systems directly
- No collaborator access needed for data resource.
- Group/individual level access control lists
- Control Read/Write access.



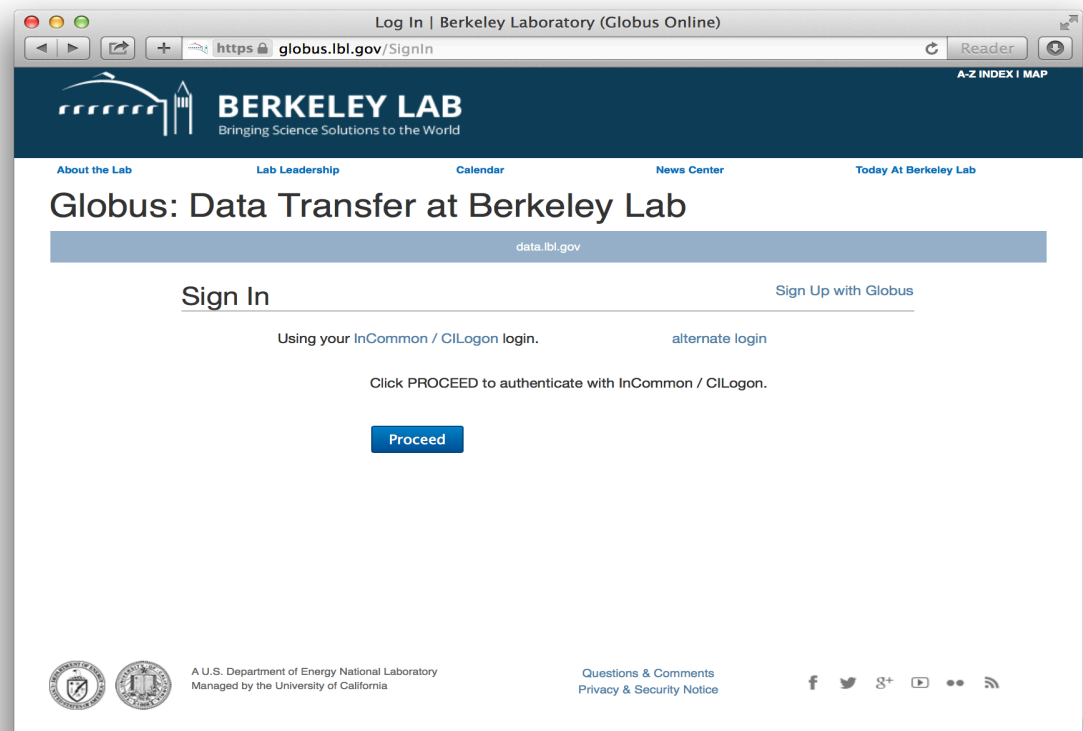
Globus Partner Program

➤ LBNL IT + NERSC part of the Partner Program

- Unlimited Managed endpoints
- Support for LBL Identity federation
- Branded website

<http://globus.lbl.gov>

- Seat on Advisory Board
- Roadmap Visibility
- Code Escrow



Globus Partner Program

- Bind your LBL & Globus accounts once
- Use LBL account (via InCommon alternate login) to access Globus portal.

Globus: Data Transfer at Berkeley Lab

data.lbl.gov

Need to Make a Connection

Your InCommon / CILogon account needs to be linked to a Globus account to make file transfer possible. You will only have to do this once.



Your InCommon / CILogon account is now linked to your Globus account.

You can now use your Globus account or your InCommon / CILogon account to sign in to this website.

Redirecting in 6 seconds

[Proceed](#)

Globus Connect Personal

- Users can create & selectively share endpoints.
- Globus Connect software for individual users

endpoint	status	credential
<div><div>Create Globus Connect Endpoint</div><div><div>Step 1 Get Your Globus Connect Setup Key</div><div>Please enter a unique name for your Globus Connect endpoint to help you identify it.</div><div>Endpoint Name: kmuriki#<input type="text"/></div><div>Generate Setup Key</div><div>Step 2 Download & Install Globus Connect</div><div>Click one of the buttons below to download and install Globus Connect for your operating system.</div><div><div> for Mac OS X</div><div> for Linux</div><div> for Windows</div></div><div>Once downloaded, run the installer. When prompted, paste in the Setup Key to complete the installation.</div></div></div>		

LBL Managed Globus

➤ LBNL IT & Computing

- `lbl#lrc` HPCS Supercluster, Lawrence Livermore, PI clusters etc

➤ LBNL Physics

- `lbl#riemann` SDSS-III Project computational cluster
- `lbl#riemann-ro` A read only endpoint on the SDSS-III DTN server
- `lbl#sdss3` An anonymous endpoint for public data sets

➤ LBNL NSD

- `lbl#ares`, `lbl#aresn-dtn`, `lbl#ares-dtn`

➤ LBNL ALS

- `alsuser#bl832data`

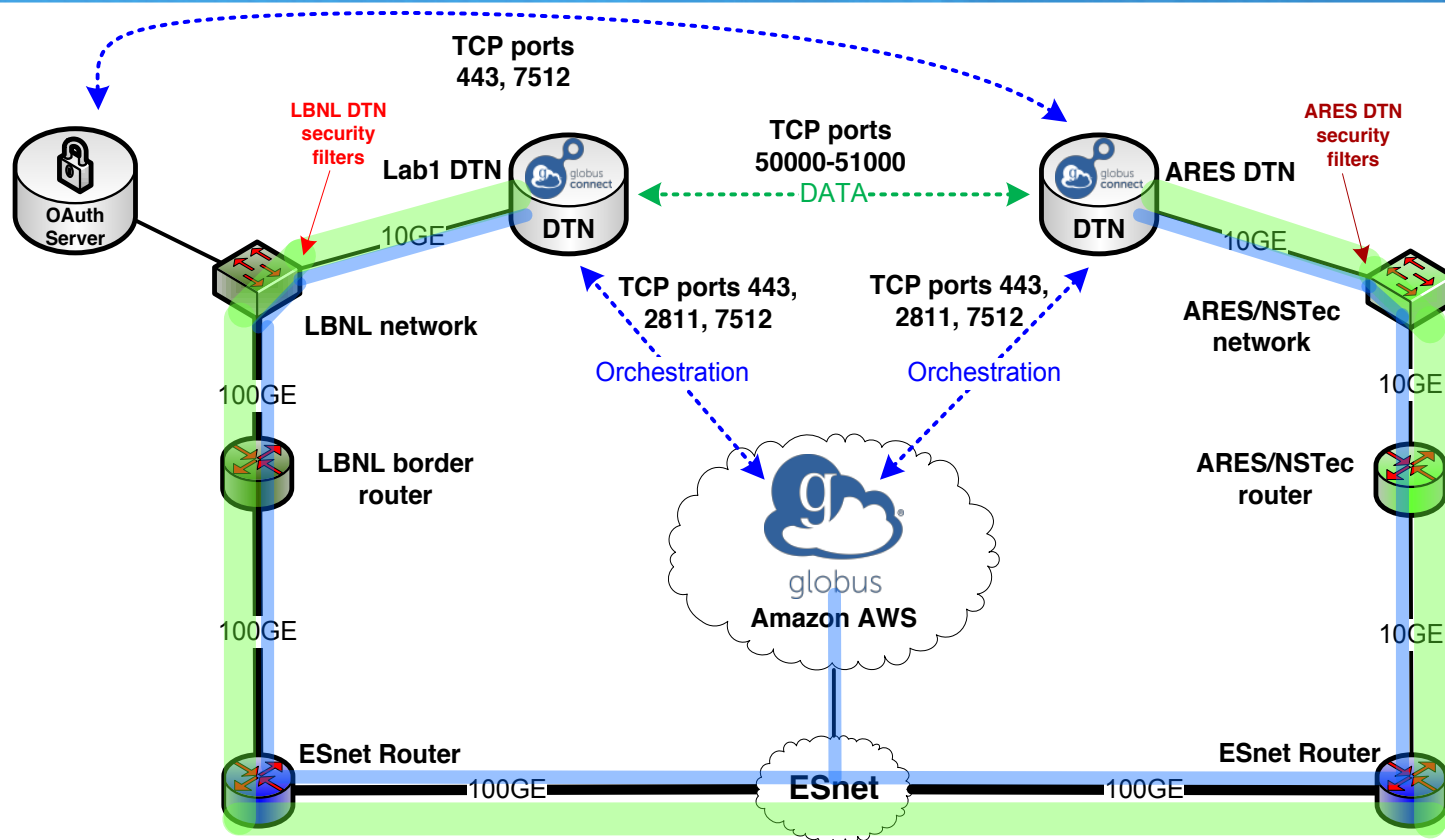
➤ NERSC

- `nersc#edison`, `nersc#carver`, `nersc#hopper`, `nersc#hpss`, `nersc#pdsf`, `nersc#dtn_jgi`


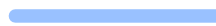
Globus Use Cases – IT can help

- Public dataset access
 - Set up an anonymous GridFTP server serving the selected data
 - Anonymous endpoint so no authentication or proxy life time.
- Share data with remote collaborators
 - Talk to IT, HPCS to enable sharing on your GridFTP server configuration
 - Add your Globus endpoint to the list of managed endpoints by LBNL IT
 - Enable power users for sharing for required duration.
 - Globus shared endpoints stay active forever.

Globus use by ARES project in NSD



Logical data path 
Physical data path 

Logical control path 
Physical control path 

LBNL DTN security filters

Src Address	Src Port	Dst Address	Dst Port
LBNL DTN	TCP 50000-51000	ARES DTN	TCP 50000-51000
LBNL DTN	TCP 443, 2811, 7512	Globus Cloud	TCP unprivileged

ARES DTN security filters

Src Address	Src Port	Dst Address	Dst Port
ARES DTN	TCP 50000-51000	LBNL DTN	TCP 50000-51000
ARES DTN	TCP 443, 2811, 7512	Globus Cloud	TCP unprivileged

Thanks & Questions

- Contact LBNL IT, HPCS
- Email : hpcshelp@lbl.gov

- For setting up Data Transfer Nodes
- Setting up & configuration of GridFTP software stacks
- Creating a Managed Globus endpoints
- Anonymous datasets access and remote collaborator sharing